sections which are connected together by fluid swivel joints. In contrast, elements 19, 22 comprise a single length of flexible pipe (col. 4, Ins. 45-47). Thus, elements 19, 22 cannot be construed to be a compass-style duct system, and Dupont does not disclose any other structure which could be considered to be a compass-style duct system.

- 2. A cable which prior to product loading and unloading operations is secured between the first and second locations. Contrary to the Examiner's assertion, the cable 48 shown in Figure 5C is at no time secured between the first and second locations. Rather, prior to product loading and unloading operations cable 48 is secured between the mouthpiece 22 of flexible pipe 19 and the second location (col. 5, Ins. 45-50). The mouthpiece 22 in turn is connected to the first location (i.e., the platform 10) by a second cable 31 (col. 4, Ins. 61-63).
- 3. Means at the first location for subjecting the cable to a constant tension. Contrary to the Examiner's assertion, element 51 shown in Figure 5C does not comprise means at the first location for subjecting the cable 48 to a constant tension. Firstly, element 51 is not located at the first location. Rather, it is integral with the mouthpiece 22 of the flexible pipe 19 (col. 5, Ins. 45-51). Secondly, element 51 is not a constant tension means. Rather, it is simply a guide/alignment rod to which the end of the cable 48 is connected (Id).
- 4. Means co-operating with the cable for guiding the connection system along the cable. Contrary to the Examiner's assertion, item 17 shown in Figure 5C does not function to guide the connection system (or in Dupont's

words, the mouthpiece and alignment cone) 22, 51 along the cable 48. Item 17 comprises a winch 47 which is positioned at the second location and around which an end of the cable 48 is wound (Fig. 6). The other end of the cable 48 is secured to the mouthpiece 22 (col. 5, Ins. 45-51). Thus, the mouthpiece 22 does not move relative to the cable 48. Therefore, the winch 47 does not function to guide the mouthpiece 22 along the cable 48.

5. Wherein the guiding means comprises a drive winch which is connected to the connection system and which in operation frictionally engages the cable to drive the connection system along the cable between the first and second locations. Contrary to the Examiner's assertion, the winch 47 is not connected to the connection system 22, 51. As discussed above, the winch 47 is positioned at the second location. In addition, the winch 47 does not frictionally engage the cable 48. Rather, the cable 48 is merely wound around the winch 47 (col. 5, Ins. 45-46). Moreover, although Figures 27-30 of Dupont disclose an embodiment of his invention in which a winch 169 is connected to the mouthpiece 160 of the flexible pipe 19, this winch does not frictionally engage the cable 170. Instead, as with the winch 47, the cable 170 is merely wound around the winch 169 (col. 9, Ins. 54-57).

Thus, Dupont clearly does not disclose at least these five limitations of claim 1. Therefore, Dupont cannot be found anticipate claim 1. Furthermore, since claims 7, 10, 12 and 13 depend from claim 1, Dupont cannot be found to anticipate these claims.

Claims 3, 4, 15 and 19 stand rejected under 35 U.S.C. 103(a) as being obvious over Dupont in view of Le Devehat (WO 01/04041). However, claims 3 and 4 depend from claim 1. Therefore, to the extent the present rejection is based on the Examiner's belief that claim 1 is anticipated by Dupont, claims 3 and 4 are patentable over any permissible combination of Dupont and Le Devehat '041 for the reasons stated above.

With regard to independent claim 15, neither Dupont nor Le Devehat '041 discloses a balanced loading and unloading arm which includes a compass-style duct system. As discussed above, Dupont's flexible pipe 19 is not a compass style duct system. Also, although Le Devehat '041 discloses an arrangement of rigid pipe sections 15, the pipe sections do not form part of a balanced arm. Rather, the pipe sections 15 are supported by a cable 17 which extends between the first and second locations. Therefore, this arrangement of rigid pipe sections cannot be construed to be a compass-style duct system.

In addition, neither Dupont nor Le Devehat '041 discloses a cable which includes a first end that is connected to the first location and a second end that is connected to a winch, the cable being wound around a pulley which is located at the second location. As discussed above, one end of Dupont's cable 48 is connected to the mouthpiece 22 of the flexible pipe 19 and the other end is wound around a winch 47 which is positioned at the second location. Thus, neither of these ends is connected to the first location. Also, as shown most clearly in Figure 1 of Le Devehat '041, one end of the cable 17 is wound around

a winch 40 which is positioned at the first location 10 and the other end of the cable is wound around a winch 48 which is positioned at the second location 11.

Therefore, claim 15 is clearly patentable over any permissible combination of Dupont and Le Devehat '041. Furthermore, since claim 19 ultimately depends from claim 15, this claim is also patentable over any permissible combination of Dupont and Le Devehat '041 for the reasons stated above.

Claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being obvious over Dupont in view of Le Devehat (WO 02/22491). However, claims 8 and 9 depend from claim 1. Therefore, to the extent the present rejection is based on the Examiner's belief that claim 1 is anticipated by Dupont, claims 8 and 9 are patentable over any permissible combination of Dupont and Le Devehat '491 for the reasons stated above.

Claim 11 stands rejected under 35 U.S.C. 103(a) as being obvious over Dupont in view of Dumas (U.S. Patent No. 3,964,512). However, claim 11 depends from claim 1. Therefore, to the extent the present rejection is based on the Examiner's belief that claim 1 is anticipated by Dupont, claim 11 is patentable over any permissible combination of Dupont and Dumas for the reasons stated above.

Claims 14, 15, 16 and 18 stand rejected under 35 U.S.C. 103(a) as being obvious over Dupont alone.

With regard to independent claim 14, however, Dupont fails to disclose any of the following limitations:

- A balanced loading and unloading arm which includes a compassstyle duct system. As discussed above, Dupont's flexible pipe 19 is not a compass-style duct system.
- 2. A cable which prior to product loading and unloading operations is stretched between the first and second locations. As discussed above, the cable 48 is stretched between the mouthpiece 22 of the flexible pipe 19 and the second location, not between the first and second locations.
- 3. A winch which is supported on the connection system and which when activated frictionally engages the cable to move the connection system from the first location to the second location. As discussed above, the embodiment of Dupont shown in Figures 27-30 includes a winch 169 which is connected to the mouthpiece 160 of the flexible pipe 19. However, the winch 169 does not frictionally engage the cable 170. Instead, the cable 170 is merely wound around the winch 169 (col. 9, Ins. 54-57).

Therefore, claim 14 is clearly patentable over Dupont under 35 U.S.C. 103(a).

With regard to independent claim 15, Dupont does not disclose a balanced loading and unloading arm which includes a compass-style duct system. As discussed above, Dupont's flexible pipe 19 is not a compass-style duct system.

Furthermore, Dupont does not disclose a cable which includes a first end that is connected to the first location and a second end that is connected to a winch, the cable being wound around a pulley which is located at the second

location. In this regard, applicant notes that the Examiner takes Official Notice that "it is widely known and notoriously old in the material handling art to use pulleys situated at locations which otherwise require a higher force for movement of a device through the use of a cable or rope, whereby the use of the pulley reduces the force to move the device" (page 7, lines 13-16). However, this contention is irrelevant to claim 15.

The pulley of claim 15 is not a force reducing device. Instead, the pulley allows the claimed assembly to use a single cable to move the connection system between the first and second locations. This arrangement reduces the number of components and connection points which may be subject to failure. In contrast, Dupont's assembly employs two cables between the first and second locations: a first cable 31 which extends between the first location and the mouthpiece 22 of the flexible pipe 19 and a second cable 48 which extends between the mouthpiece and the second location. Therefore, even if the person of ordinary skill in the art were motivated to wind the cable 48 around a pulley positioned at the second location, the result would not render the invention of claim 15 obvious.

Therefore, claim 15 is patentable over Dupont under 35 U.S.C. 103(a). Furthermore, claims 16 and 18 depend from claim 15. Therefore, to the extent the rejection of claims 16 and 18 is based on the Examiner's belief that claim 15 is obvious over Dupont, claims 16 and 18 are patentable over Dupont for the reasons stated above.

For the foregoing reasons, claims 1, 3, 4 and 7-19 are submitted as allowable. Favorable action is solicited.

Respectfully submitted,

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